

REMARKS

Reconsideration of this Application is respectfully requested. Applicant wishes to thank the Examiner for his kind assistance and helpful suggestions during the Interview on January 4, 2005. Pursuant to the indicated allowability of claims 5-7, claim 5 has been amended, accordingly, and placed in independent form to include all of the elements of base claim 1, there being no intervening dependent claims. As claims 6 and 7 depend from claim 5, claims 5-7 are now believed in condition for allowance. Claims 10 and 11 were allowed previously. Claims 1-11 are in this case of which claims 1, 5 and 9-11 are independent claims. Applicant notes that payment for an additional independent claim in excess of three is attached to this Amendment.

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In the Office Action, initially the Examiner rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by Garofalo, U.S. Patent No. 5,443,593. Specifically, the Examiner takes the position that Garofalo shows a swim fin with a shoe (2) and a blade (1) with lateral ribs (5). The Examiner explains that the shoe is made of first soft material, and that the blade is made of a more rigid material (citing column 1, lines 60-65). He also states that the blade has longitudinal slots (102, 102') and openings (101, 101'). The slots, the Examiner continues, are symmetric about the long axis of the fin. In addition, he finds that the openings extend diagonally from the shoe toward the lateral edges of the blade at least along a portion of the opening. Further, the Examiner notes that the slots and openings are filled with a second soft material, which is the same material as that of the shoe (referencing column 2, lines 3-5). The Examiner notes that, in Applicant's disclosure, the first and second relatively yielding materials are the same

material.

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Applicant, however, respectfully disagrees with the Examiner's reading and application of Garofalo to the present invention.

First, Applicant submits, Garofalo discloses a fin having a pair of inner slits 102, 102' symmetrically arranged with respect to the longitudinal axis of the fin, and a pair of outer slits 101 and 101' that are substantially parallel to the inner slits and, more precisely, extend parallel to the longitudinal side of the fin ending at the shoe edge. Unlike Garofalo, Applicant's fin does not have a pair of outer slits, but rather a pair of diagonal slits that extend in a substantially transverse direction, from the longitudinal side of the fin to the shoe edge. Moreover, the outer slits of Garofalo extend from the shoe up to the front edge of the fin (or free edge), whereas in the fin, according to the present invention, two diagonal openings extending from the side (or longitudinal) edge of the blade to the shoe are provided.

The foregoing is not just a structural difference, as it also achieves a considerably different and improved effect. Specifically, Garofalo purports to provide flow channels with opposite concavities on the fin blade. Applicant's invention, on the other hand, provides the blade with longitudinal and diagonal hinges. This enables the blade to assume a concave shape during propulsion, somewhat like that of a spoon.

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Next, the Examiner rejected claims 2 and 8 under 35 U.S.C. § 103(a) as being obvious and, therefore, unpatentable over Garofalo in view of Semeia, U.S. Patent No. 6,568,974. First, with respect to claim 2, the Examiner admits that Garofalo does not

show ribs (5) lined with the soft material. He then looks to Semeia as showing a swim fin with a composite structure purportedly like that of Garofalo, including a frame (4) of rigid material, and the remainder of the swim fin, including the shoe, slots and openings in the frame as well as a lining around lateral edges of the frame, being of a softer material. The Examiner concludes that it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Garofalo by lining ribs (5) with a softer material, as allegedly taught by Semeia. The motivation, the Examiner explains, would be to optimize the feel and hydrodynamic efficiency of the swim fin.

Regarding claim 8, the Examiner asserts that Garofalo shows a curb (401) at the front free edge of the blade. The curb, he asserts, is made of soft material and connects the soft material in the slots and openings. Semeia, says the Examiner, shows that the lining of the ribs extends all the way to the front edge of the ribs. Therefore, the Examiner determines, the lining would intersect the curb.

Furthermore, the Examiner rejected claims 3 and 4 under 35 U.S.C. § 103(a) as obvious and, therefore, unpatentable over Garofalo in view of Semeia, as applied to claim 2 above, and further in view of Mehrmann et al., U.S. Patent No. 6,224,443. More particularly, Semeia purportedly teaches that two or more different materials can be used for making the various parts of the frame, which includes the lateral ribs. According to the Examiner, Mehrmann et al. show a flipper made of materials having different hardnesses. The shoe, the Examiner explains, can be made of soft 30 durometer material, the blade of rigid 90 durometer material, and the lateral ribs of intermediate 80 durometer material. Therefore, the Examiner concludes that it would have been obvious to one having

ordinary skill in the art at the time the invention was made to further modify Garofalo by making the ribs of a material with intermediate hardness. The motivation, he says, would be to optimize the hydrodynamic performance of the swim fin.

With specific regard to claim 4, the Examiner takes the position that Garofalo and Semeia show that the ribs enlarge in the rearward direction. Therefore, the Examiner determines, the lining on the rib would also enlarge along with the rib. He notes that the structure can be considered a fairing.

Finally, the Examiner rejected claim 9 under 35 U.S.C. 103(a) as being obvious and, therefore, unpatentable over Garofalo in view of Semeia and Takizawa. The Examiner reiterates that Garofalo shows a swim fin with a shoe (2) and a blade (1). The shoe, he says, is made of a soft material, the blade is constructed of a more rigid material (citing column 1, lines 60-65), and the blade has lateral ribs (5). In addition, the Examiner states that Semeia shows a swim fin with a composite structure like that of Garofalo, and a frame (4) of rigid material, the remainder of the swim fin, including the shoe and a lining around lateral edges (i.e. ribs) of the frame, allegedly being of a softer material. Therefore, the Examiner concludes that it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Garofalo by lining the ribs (5) with the softer material as taught by Semeia. The motivation, he says, would be to optimize the feel and hydrodynamic performance of the swim fin. Both Garofalo and Semeia, the Examiner argues, show that the ribs enlarge in the rearward direction. Therefore, he concludes, the lining on the rib would also enlarge along with the rib. Such enlargement allegedly is at a flank portion of the shoe and creates a sideways projecting fairing.

The Examiner again acknowledges that while Garofalo does not show the rearward extent of the blade or the connections for a strap, he believes that this reference does show that the lateral rib portion of the blade flanks the foot pocket, and that portions of the blade form flanks at the sides of the front part of the shoe. Accordingly, the Examiner says, one wishing to make and/or use the Garofalo fin would necessarily have to determine how to construct the rearward extent of the fin that is not shown by Garofalo, and would look to the prior art for guidance. Specifically, he believes, one would look to Takizawa which, he alleges, shows a swim fin with a shoe, and a blade with lateral ribs, the ribs allegedly extending rearwardly to form flanking portions of the shoe. The portions, the Examiner asserts, terminate in a hood with a seating for buckle (5) to engage. On this basis, the Examiner concludes, as before, that it would have been obvious to modify Garofalo by extending the ribs rearwardly and providing a seating for a buckle for a strap. The motivation, the Examiner states, would be to provide a known apparatus for connecting a heel strap for the purpose of keeping a user's foot inside the pocket.

He notes that the term "sideways" is not given any relative meaning the claim. Furthermore, the Examiner states that the lateral rib (6) of Takizawa extends sideways in a direction from the bottom of the shoe toward the top of the shoe. In this direction, he finds, the rib has a thickness not less than that of the buckle (5).

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Turning now to the Examiner's Response To Arguments, initially, the Examiner states that Applicant's argument filed on May 31, 2005 regarding the drawing objection is persuasive, and that the drawing objection is withdrawn, accordingly.

Next, the Examiner indicates that, while Applicant's arguments filed on May 31, 2005 regarding claims 1-4, 8 and 9 have been fully considered, they are not deemed persuasive.

In particular, with regard to claim 1, Applicant, says the Examiner, argued that Garofalo does not show "a pair of diagonal slits that extend in a substantially transverse direction, [from] the longitudinal side of the fin to the shoe edge". The Examiner then takes the position that such is not recited in Applicant's claims, in that claim 1 does not recite (i) "substantially transverse direction" but rather "extending diagonally", (ii) "from longitudinal side fo the fin to the shoe edge", but rather "from the show *toward* lateral edges of the blade" (emphasis added by Examiner), nor does claim 1 recite (iii) "two diagonal openings extending from the side...edge of the blad to the shoe", but rather "from the shoe *toward* lateral edges of the blade" (emphasis added by Examiner).

Taking the position that Applicant was arguing elements that are not recited in the claims, the Examiner concluded that such arguments are not persuasive. Also, the Examiner noted that although the claims are interpreted in light of the Specification, limitations from the Specification are not read into the claims.

Next, with regard to claim 2, the Examiner took the position that while Applicant argues that neither Semeia nor Garofalo disclose the considerable improvement in "spoon effect" of the fin, such "spoon effect", says the Examiner, is not recited in the claims and, as such, Applicant's arguments are not persuasive. In addition, he notes that Semeia teaches the user of material around the ribs, and that such rejection is proper.

Referring now to claim 3, the Examiner asserts that Applicant does not make any arguments against the rejection set forth in the Office Action and, thus, the rejection is

maintained.

With respect to claims 4 and 9, the Examiner takes the position that Applicant merely alleges that neither Garofalo and Semeia disclose the lining enlarging rearwardly to form a fairing. Applicant, the Examiner indicates, does not address the rejection set forth in the Office Action where it is asserted that the modified invention would necessarily have an enlarged lining that constitutes a fairing; therefore, Applicant's argument is not considered persuasive.

As for claim 9 only, according to the Examiner, Applicant argues that the Takizawa fin is contrary to Applicant's fin. In response, the Examiner states that Takizawa shows elements of claim 9 as described in the rejection. The raised sides, the Examiner continues, that Applicant refers to constitute two arms that extend backwardly to form containment flanks for the shoe. He states that neither "defining a cavity there-between" nor "the side profile of the fin" are not recited in claim, and concludes that Applicant is arguing features that are not recited in the claims.

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Notwithstanding the foregoing, the Examiner indicates that claims 10 and 11 are allowed. He also states that claims 5-7 are objected to as being dependent upon a rejected base claim, i.e., claim 1, but would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

Accordingly, claim 5 has been amended and placed in independent form to include all of the elements of base claim 1, there being no intervening dependent claims. As claims 6 and 7 each depend from claim 5, claims 5-7 are now considered in condition for allowance.

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As for the remaining points raised by the Examiner, Applicant, however, respectfully disagrees and maintains his position with regard to the Examiner's reading and application of the cited references to the present invention.

First, Applicant respectfully states that, as set forth in the Specification (as amended), from page 1, line 24, to page 2, line 7, the lining is formed in lateral ribs that extend generally above and below the plane of the blade so as to improve the propulsive efficacy or "spoon effect" of the fin without increasing the overall rigidity of the blade. Such, Applicant respectfully reiterates, is neither disclosed nor suggested by the teachings of Semeia or Garofalo, whether taken alone or in any combination.

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While Applicant considers the foregoing to be inherent in the claims, pursuant to the Interview with Examiner Avila, claims 1 and 9 are amended herein, without prejudice or disclaimer, to clarify that, in addition to features set forth in these claims, lateral ribs are both above and below the plane of the blade so as to enhance the propulsive efficacy or "spoon effect" of the fin without increasing the overall rigidity of the blade.

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As for the Examiner's remaining arguments, Applicant respectfully reiterates that neither Garofalo nor Semeia disclose or suggest a fin with an enlarged front edge formed with the same lining of the side edges as set forth in Applicant's claim 8. To the contrary, we respectfully submit, in combining Garofalo with Semeia, the formation of such flow channels would be blocked by the enlarged edge.

In addition, Garofalo and Semeia, we submit, also do not teach or suggest the elements of Applicant's claim 4, namely, a fin wherein the "lining of the lateral ribs enlarges rear-wardly along flank portions of the shoe so as to form respective sideway projecting fairings", nor features of claim 9, e.g., "lateral ribs having a lining extending therefrom, the lining being constructed of a second relatively yielding material that enlarges at flank portions of the shoe, such that a sideways projecting fairing is generated".

Similarly, Takizawa does not show operative elements of claims 5 and 9, that is, respectively, a fin having a blade that "extends rearwardly by two arms forming containment flanks for the shoe and terminating with a hood to form a seating in which a respective buckle of a closure strap can engage" or "fairings projecting sideways to a thickness of not less than that of the respective buckle". Takizawa specifically discloses a fin having a rear portion of the blade formed of a flat portion with raised sides for holding the shoe. This is contrary to Applicant's fin wherein a rear portion of the blade is formed by two arms defining a cavity therebetween with hoods for attaching the buckles at the end of the arms. Takizawa (FIG. 1) additionally utilizes a buckle that projects significantly from the side profile of the fin, thereby producing hydrodynamic resistance that is virtually eliminated by Applicant's invention.

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Applicant respectfully submits that none of the cited references, whether taken alone or in combination, disclose or suggest Applicant's invention, as claimed. Withdrawal of the Examiner's rejections under §§ 102(b) and 103(a) is, therefore, respectfully requested.

Applicant has made a good faith attempt to place this Application in condition for allowance. Favorable action is requested. If there is any further point requiring attention prior to allowance, the Examiner is asked to contact Applicants' counsel at (646) 265-1468.

Respectfully submitted,



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